

Application No.: 10/559,741

Filed: December 6, 2005

TC Art Unit: 3662

Confirmation No.: 3855

AMENDMENTS TO THE SPECIFICATION

Please amend the Abstract of the Disclosure as follows:

A system and method for estimating the ~~signal-to-noise ratio~~ {SNR} in a sonar environment and for determining the effect of the estimated SNR on sonar ranging accuracy. The system includes a sensor, a transmitter, a receiver, a plurality of band-pass filters, a cross correlator, and a data analyzer. The transmitter transmits a pulse-first signal having a predetermined frequency range through a transmission medium. The sensor senses ~~generates an echo returning from a selected target, and provides a~~ second signal representing corresponding the to an echo signal reflected from an object. The first and second signals are ~~provided to the receiver, which in turn provides an indication of~~ the echo to the band-pass filters, each. ~~The filters operative~~ to pass a respective sub-band of frequencies. The filters provide filtered versions of the first and second signals ~~echo and pulse~~ to the cross correlator, which performs cross correlation operations ~~on the filtered echo and pulse signals.~~ A data analyzer analyzes ~~By analyzing the cross correlator output data, to~~ determine the system can determine peak variability of cross correlation peaks within multiple each frequency sub-bands ~~sub-~~

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band, thereby allowing more accurate SNR estimations in noisy environments.